# Unit Plan for Solutions and Solubility Unit:

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| **Lesson 1: Intro to Solutions** - pre-assessment questions - classifying solutions - testing solubility - properties of solutions E2.1 | **Lesson 2: Factors that Affect Solubility** - water  E3.1, E2.1, E3.2 | **Lesson 3: LAB for Factors** - lab design to test factors - carry out lab - discuss results in groups  E2.4, E3.2 | **Lesson 4: Concentration** - molarity   E2.1, E2.2 | **Lesson 5: Concentration cont.** - group work activity - dilutions  E2.1, E2.2, E2.3 |
| **Lesson 6: Preparing Solutions** - flask types and accuracy - mass accuracy - concentration determination E2.2, E2.3 | **Lesson 7: Reactions in Aqueous Solutions** - quiz (20 min) - demo E2.1, E3.3, E3.4 | **Lesson 8: Ionic Equations and Reactions**   E3.2, E2.5, E2.4 | **Lesson 9: Stoichiometry** - intro to concept - practice problems - group work  E2.1, E2.6 | **Lesson 10: Stoichiometry** - applied to solution chemistry - C1V1 = C2V2 |
| **Lesson 11: Water**  - water quality: factors, determination - water pollution E3.1, E2.8 | **Lesson 12: Water** - water purification - waste-water treatment  E3.1, E2.8, E2.2 | **Lesson 13: FIELD TRIP to Water Treatment Facility**   E2.8, E3.3 | **Lesson 14: Ions & Solubility Mini Lab** - quiz (20 min) - Determine types of ions in solution based on colour -dissolve sugar cubes in different water temperatures  E3.3, E2.4, E3.2 | **Lesson 15: Acids/Bases** - pH - demo  E2.1, E3.6 |
| **Lesson 16: Acids/Bases** - reactions of - strong acids/bases - weak acids/ bases E2.1, E3.6, E3.5 | **Lesson 17: Neutralization** - reactions - real world examples  E2.7, E2.6, E3.5 | **Lesson 18: LAB for Acids/Bases** - Titration  E2.7 | **Lesson 19: Review/Study day** **-**Jeopardy style review day | **Lesson 20: Unit Test** |